CONTINUOUS PROCESSES FOR PREPARING CONCENTRATED AQUEOUS LIQUID BIOCIDAL COMPOSITIONS

Abstract of the Disclosure

The process involves (a) continuously forming bromine chloride from separate feed streams of bromine and chlorine by maintaining said streams under automatic feed rate control whereby the streams are continuously proportioned to come together in equimolar amounts to form bromine chloride; (b) continuously forming an aqueous product having an active bromine content of at least 100,000 ppm (wt/wt), a pH of at least 7, and an atom ratio of nitrogen to active bromine greater than 0.93:1 by continuously feeding into mixing apparatus separate feed streams of (1) bromine chloride formed in (a), and (2) an aqueous solution of alkali metal salt of sulfamic acid, under automatic feed rate control whereby the feed streams are continuously proportioned to come together in amounts that produce an aqueous product having an active bromine content of at least 100,000 ppm (wt/wt), a pH of at least 7, and an atom ratio of nitrogen to active bromine from (1) and (2) greater than 0.93:1; and, (c) withdrawing said aqueous product from said mixing apparatus at a rate sufficient to enable the continuous feeding in (a) and (b) to be maintained.